Practice: 592 - Feed Management Scenario: #1 - Dairy - Feed Mgt

Scenario Description:

Feed ration management on a dairy operation that does not have access to enough acres to spread all of its manure nutrients at an agronomic rate. The resource concerns are water quality degradation, excessive manure nutrients particularly phosphorus and nitrogen. The goal of the practice is to reduce the amount of nutrients in the raw manure so that it is easier for "landlocked" farmers to apply the manure at agronomic rates, thereby reducing or eliminating water quality degradation concerns.

Associated practices: Nutrient management (590), Prescribed Grazing (528), Forage and Biomass Planting (512), Forage Harvest Management (511)

Before Situation:

Producer is feeding a higher level of protein (17%) and phosphorus (0.45%) than is needed to meet National Research Council (NRC) recommendations for a herd of this type and at this stage of production. The operation does not have all of the available acres that it needs to use the nutrients in the manure when spread at agronomic rates causing over application of nutrients on land affecting soil quality, which may lead to water quality degradation.

After Situation:

The scenario assumes the lactating group is being evaluated. A baseline analysis and 3 quarterly reports of manure, feed, and milk analysis will be completed to determine the current nutrient inputs and outputs. The Producer will work to reduce feed protein and phosphorus levels to that of NRC recommendations for a herd of this type and at this stage of production (16% protein and 0.35% phosphorus). Producer will explore alternative feedstuffs and alternative feeding strategies to bring manure nitrogen and phosphorus levels down without hurting production of the animals or profitability of the operation. Alternative feeding strategies can include things like grouping animals per similar age or stage of production, feeding based on individual rolling average production, evaluating Income over Feed Costs, as well as dry matter intake and milk nitrogen efficiencies.

Scenario Feature Measure: Group

Scenario Unit: Each
Scenario Typical Size: 1

Scenario Cost: \$3,177.40 Scenario Cost/Unit: \$3,177.40

Cost Details (by category):						
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost
Labor						
Specialist Labor	23	5 Labor requiring a specialized skill set: Includes Agronomists, Foresters, Biologists, etc. to provide additional technical information during the planning and implementation of the practice. Does not include NRCS or TSP services.	Hour	\$98.18	12	\$1,178.16
General Labor	23	1 Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$20.77	24	\$498.48
Skilled Labor	23	O Labor requiring a high level skill set: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc	Hour	\$32.18	24	\$772.32
Materials						
Test, MUN Testing	199	Testing nitrogen level in milk as a measure of nitrogen that will be exhibited in manure. Includes materials and shipping only.	Each	\$0.42	4	\$1.68
Test, Feed Analysis	198	9 Representative sample of feed. Includes materials and shipping only.	Each	\$34.05	16	\$544.80
Test, Manure Analysis	30	Moisture, Total N, P, K. Includes materials and shipping only.	Each	\$45.49	4	\$181.96